

Claims

1. Rotor shaft of a spinning rotor with an annular magnetic bearing component, which is secured with respect to the centrifugal force effective during the spinning process by a ring liner, for radially and axially supporting the rotor shaft, wherein the rotatable magnetic bearing component interacts with a stationarily arranged magnetic bearing component, characterised in that the magnetic bearing component connected to the rotor shaft (4) of the spinning rotor (3) is configured as a slotted permanent magnet ring (32, 42), in order to ensure the deformability required to draw on a ring liner (6, 7).

2. Rotor shaft according to claim 1, characterised in that the slotted permanent magnet ring (32, 42), prior to its installation, has an internal diameter (RM_{internal}), which is slightly above the external diameter (A_{external}) of the bearing lug (35, 36) of a receiver (46, 47) and has an external diameter (RM_{external}), which is above the internal diameter (RB_{internal}) of the ring liner (6, 7).

3. Rotor shaft according to claim 1, characterised in that the slot (27) is dimensioned such that the permanent magnet ring (32, 42) is completely closed after drawing on the ring liner (6, 7).

4. Rotor shaft according to claim 1, characterised in that the slotted permanent magnet ring (32, 42) is locked on a bearing lug (35, 36) of a receiver (46, 47) which is connected in a rotationally engaged manner to the rotor shaft (4).

5. Rotor shaft according to claim 1, characterised in that the ring liner (6, 7) is manufactured from a material guaranteeing high tensile strength, preferably a carbon fibre-reinforced plastics material (CFRP).